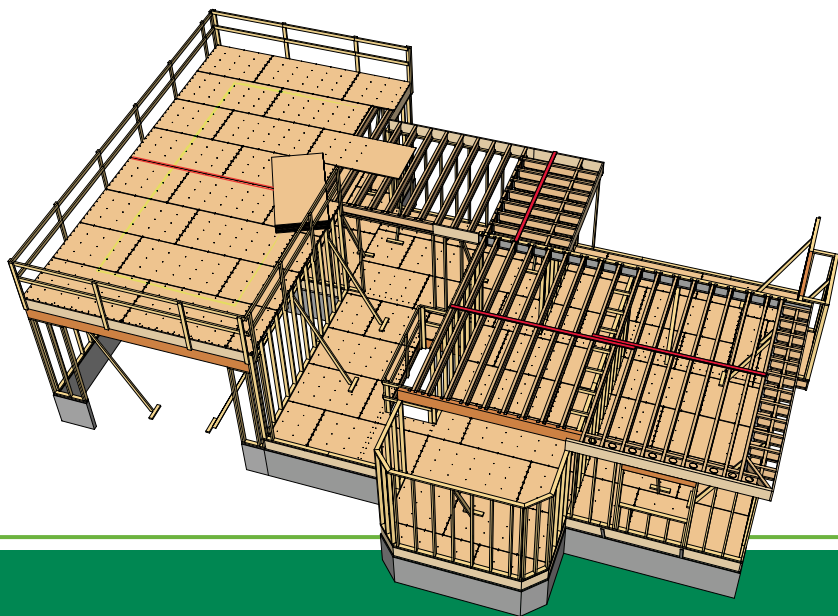




FLOOR FRAMING STANDARDS

A Framers's Guide to the INSTALLATION PROCESS



WEYERHAEUSER FLOOR FRAMING STANDARDS

A Framers's Guide to the INSTALLATION PROCESS

Safety and Site Preparation	Step 1
Stage Materials	Step 2
Precut Accessories	Step 3
Square and Snap Line for Sill Plate	Step 4
Joist, Blocking, and Rim Board Layout	Step 5
Install Hangers and Flush Beams	Step 6
Install Starter- and End-Wall Rim Board	Step 7
Install Joists, Accessories, and Safety Bracing	Steps 8–9
Install Subfloor	Steps 10–11
Frame Second Floor	Step 12
Sheath Second Floor	Step 13
Nail Chart	Appendix



Refer to the Trus Joist® Installation Guide for all construction details.

Weyerhaeuser Layout Drawing — For Product Reference Only.

JAVELIN[®]
software by Weyerhaeuser

Framing Connector Summary													
Plan Label	Qty	Manuf.	Product	Face/Supporter	Nails	Top Nails	Member/Supported	Nails	Skew Slope	Supporting Material	Type Backer Bks.	Supported Product	Web Stiffeners
H1	1	SST	HGUS412	56- 16d common	-	20- 16d double shear	-	-	-	LSL	No	3 1/2" x 11 7/8" TimberStrand® LSL Beam (1.55E)	No
H2	8	SST	ITS2.06/11.88	2- 10d x 1-1/2	-	4- 10d x 1-1/2	-	-	-	LSL	No	11 7/8" TJI 210	No
H3	18	SST	IUS2.06/11.88	10- 10d x 1-1/2	-	-	-	-	-	LSL	No	11 7/8" TJI 210	No
H4	1	SST	IUS2.06/11.88	10- 10d common	-	-	1- Simpson SD&x1.25 screw installed thru the seat of the hanger	-	-	LSL	No	11 7/8" TJI 210	No
H5	3	SST	IUS2.06/11.88	10- 10d common	-	-	-	-	-	UJOIST	2	11 7/8" TJI 210	No
H6	1	SST	MIU1.81/11	20- 10d x 1-1/2	-	2- 10d x 1-1/2	-	-	-	LSL	No	1 3/4" x 11 7/8" TimberStrand® LSL Beam (1.55E)	No
H7	1	SST	MIU1.81/11	20- 10d common	-	2- 10d x 1-1/2	-	-	-	UJOIST	1	1 3/4" x 11 7/8" TimberStrand® LSL Beam (1.55E)	No

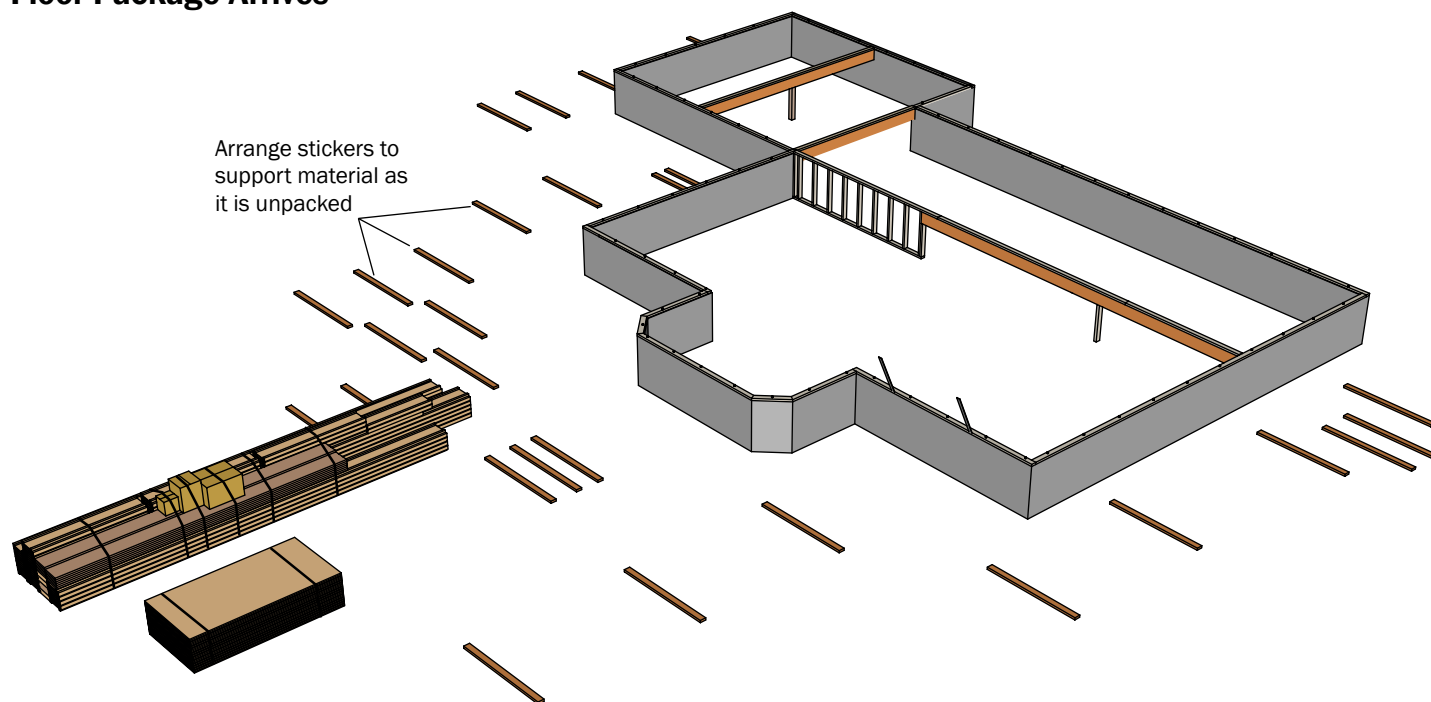
Stay Safe!
Wear Personal
Protective Equipment (PPE)



WARNING: Drilling, sawing, sanding or machining wood products generates wood dust. The paint and/or coatings on this product may contain titanium dioxide. Wood dust and titanium dioxide are substances known to the State of California to cause cancer. For more information on Proposition 65, visit wy.com/inform.

Wood dust is classified as an irritant.
Refer to MSDS sheets available
from Weyerhaeuser.

Floor Package Arrives



WARNING: JOISTS ARE UNSTABLE UNTIL BRACED Laterally

BRACING INCLUDES: Blocking, Hangers, Rim Board, Sheathing, Rim Joist, Strut Lines

Lack of proper bracing during construction can result in serious accidents. Observe the following guidelines:

1. Properly install all blocking, hangers, rim boards, and rim joists at TJI® joist end supports.
2. Establish a permanent deck (sheathing), fastened to the first 4 feet of joists at the end of the bay or braced end wall.
3. Safety bracing of 1x4 (minimum) must be nailed to a braced end wall or sheathed area and to each joist.
4. Sheathing must be completely attached to each TJI® joist before additional loads can be placed on the system.
5. Ends of cantilevers require safety bracing on both the top and bottom flanges.
6. The flanges must remain straight within $\frac{1}{4}$ " from true alignment.

This guide is intended for the products shown in dry-use conditions.

La Sécurité Avant Tout
AVERTISSEMENT

- Les solives non contreventées latéralement sont instables. Voir le guide d'installation avant la pose des solives TJI®.
- Ne pas circuler sur les solives TJI® avant qu'elles ne soient adéquatement contreventées. Risque de blessure.
- Ne pas empiler des matériaux sur des solives avant d'avoir installé les sous-plancher. Les entreposer temporairement au-dessus des poutres et murs.

La Seguridad Ante Todo
ADVERTENCIA

- Las viguetas son inestables hasta que sean reforzadas lateralmente. Vea la guía de instalaciones **antes** de instalar las viguetas TJI®.
- No camine sobre las viguetas hasta que sean apuntaladas.
- No ponga materiales de construcción sobre las viguetas TJI® antes de instalar el triplay. Ponga materiales únicamente sobre vigas o muros.

woodbywy.com 1.888.453.8358



STAGE MATERIALS

Joist Identification

TJI® 110 Joists

TJI® 210 Joists

TJI® 230 Joists

TJI® 360 Joists

TJI® 560 Joists

Top Mount Face Mount

**STAGING MATERIALS
SAVES TIME**

NOTE:
Blocking may be shipped as short lengths

Products			
PlotID	Length	Product	Piles Net Qty
F24	24' 0"	11 7/8" TJI 210	1 13
F22	22' 0"	11 7/8" TJI 210	1 9
F14	14' 0"	11 7/8" TJI 210	1 9
F14-2	14' 0"	11 7/8" TJI 210	2 4
F11	11' 0"	11 7/8" TJI 210	1 10
F6	6' 0"	11 7/8" TJI 210	1 14
F5	5' 0"	11 7/8" TJI 210	1 2
F4	4' 0"	11 7/8" TJI 210	1 3
R11	11' 0"	11 7/8" TJI 360	1 2
SCA1	16' 0"	1 1/4" x 11 7/8" 1.3E TimberStrand LSL	1 12
S1	4' 0"	1 3/4" x 11 7/8" TimberStrand® LSL Beam (1.55E)	1 1
S2	16' 0"	3 1/2" x 11 7/8" TimberStrand® LSL Beam (1.55E)	1 1
S3	14' 0"	3 1/2" x 11 7/8" TimberStrand® LSL Beam (1.55E)	1 1
S4	13' 0"	3 1/2" x 11 7/8" TimberStrand® LSL Beam (1.55E)	1 1
S5	11' 0"	3 1/2" x 11 7/8" TimberStrand® LSL Beam (1.55E)	1 1
PP1	4' 0"	3 1/2" x 3 1/2" 1.8E Parallam PSL	1 1
P1	11' 0"	5 1/4" x 11 7/8" 2.0E Parallam PSL	1 1

Accessories			
PlotID	Length	Product	Piles Net Qty
	1' 8 15/16"	23/32" Backer Blocks	1 2
	1' 0"	23/32" Backer Blocks	1 3
	2' 0"	1 7/8" net Filler Blocks	1 41
		23/32"x48"x96" OSB Weyerhaeuser Edge (0/24) T&G FF	1 1

Blocking			
PlotID	Length	Product	Piles Net Qty
FBK1	2' 0"	11 7/8" TJI 210 1"	33
FBK1	1' 0"	11 7/8" TJI 210 1"	6
FBK2	1' 0"	11 7/8" TJI 210 1"	1
SSBK1	2' 0"	2 X 4 DF Stud	5

Microllam® LVL

TimberStrand® LSL

Parallam® PSL

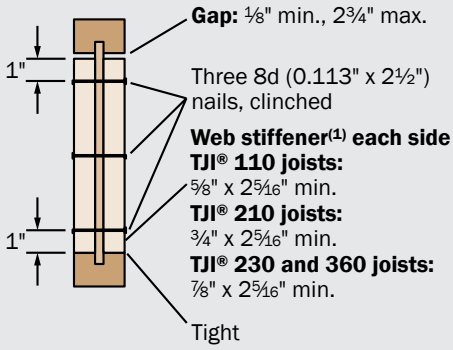
Sample Residence
Job # 658-426
Good Builders Inc.
ABC Lumber
(800) 555-0000

See architect or engineer plans for dimensions and special details

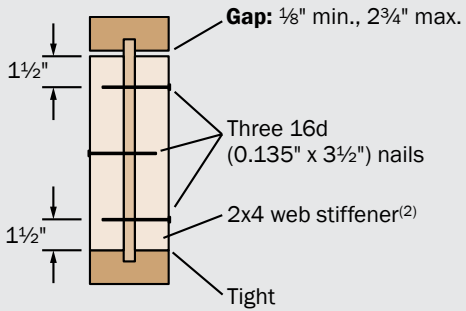


Web Stiffeners

TJI® 110, 210, 230, 360 Joists

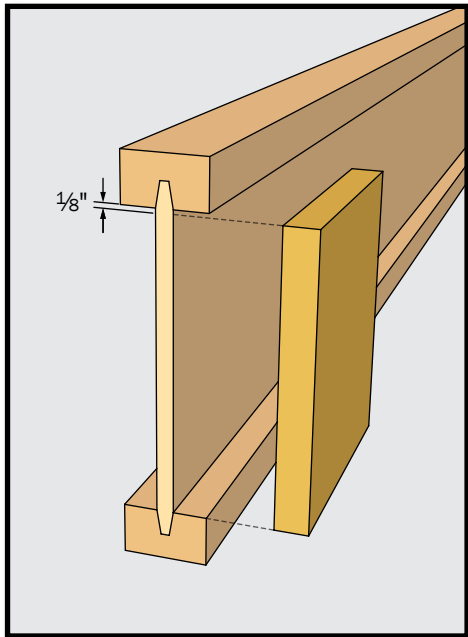


TJI® 560 Joists

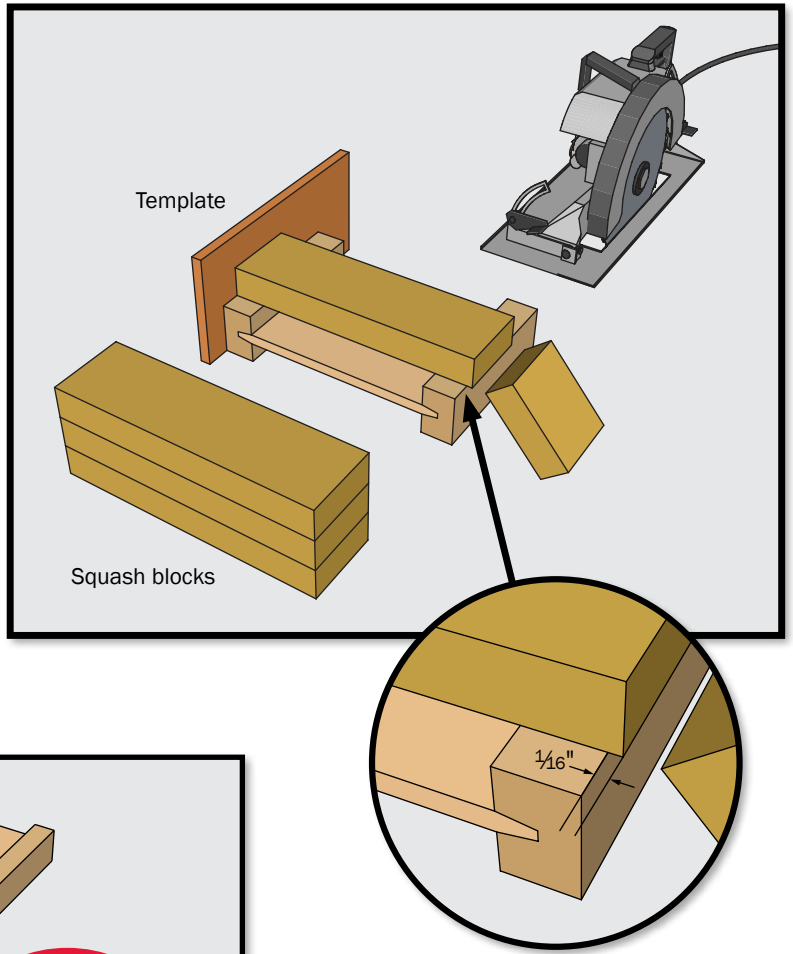


(1) PS1 or PS2 sheathing, face grain vertical
(2) Construction grade or better

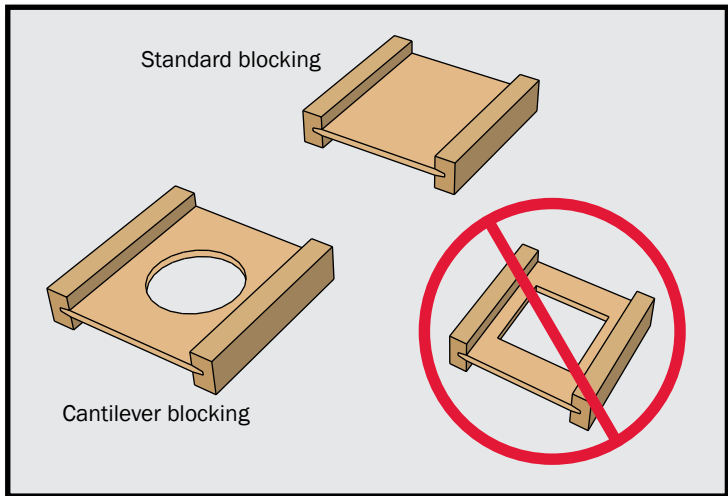
Cutting Web Stiffeners



Cutting Squash Blocks



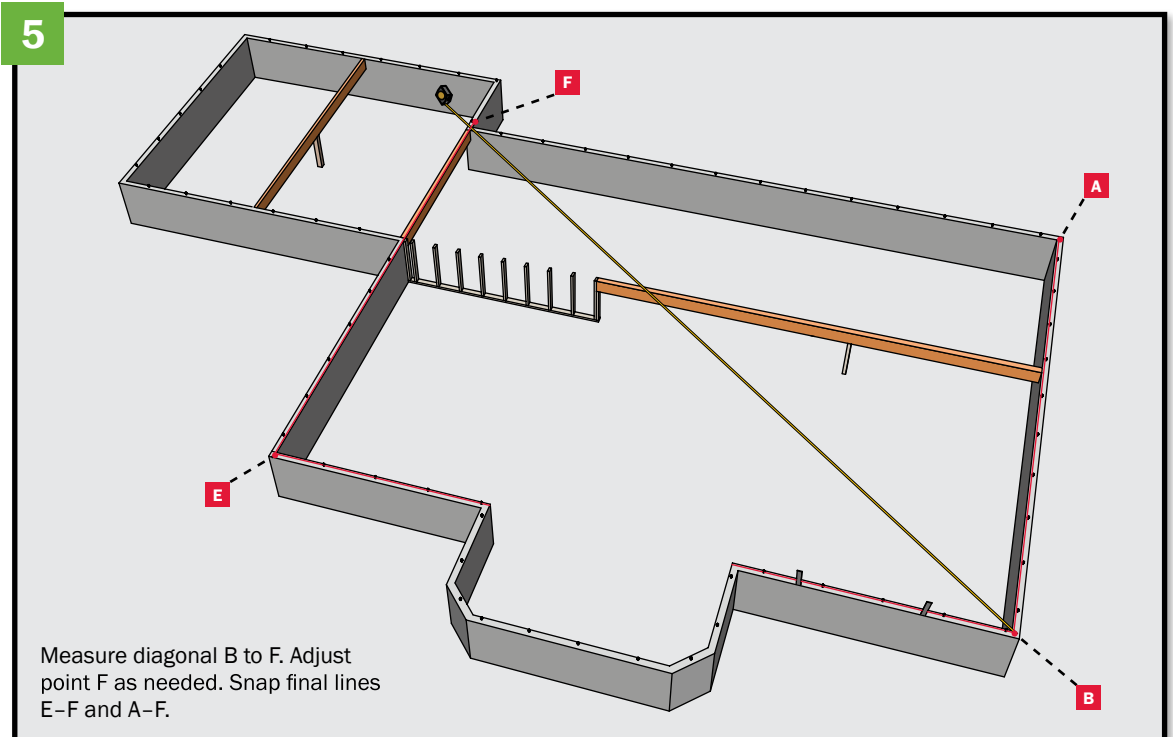
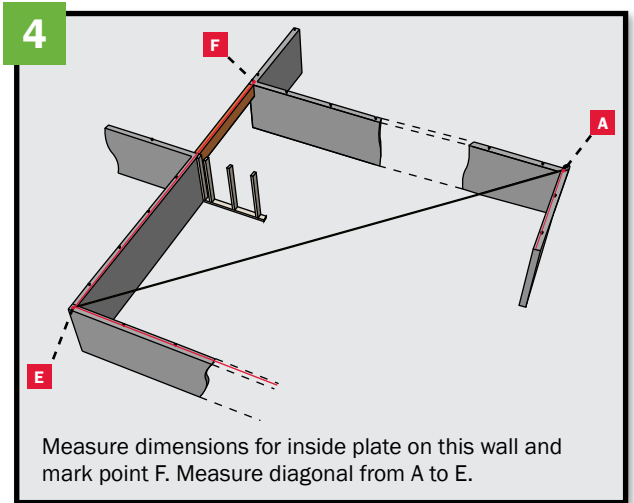
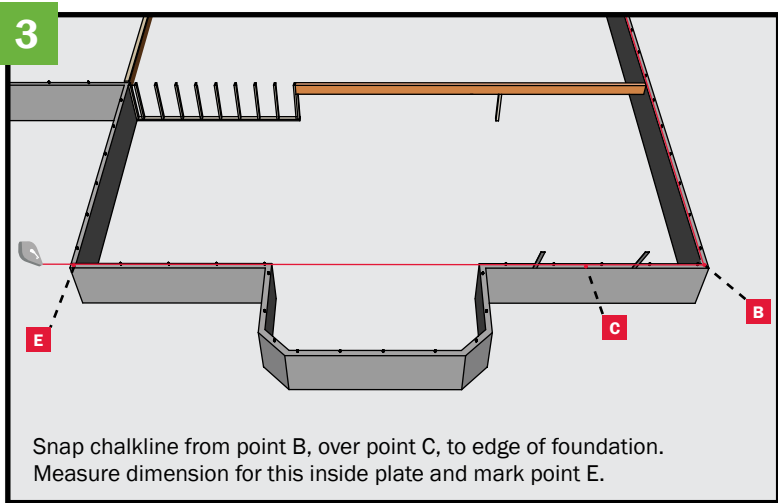
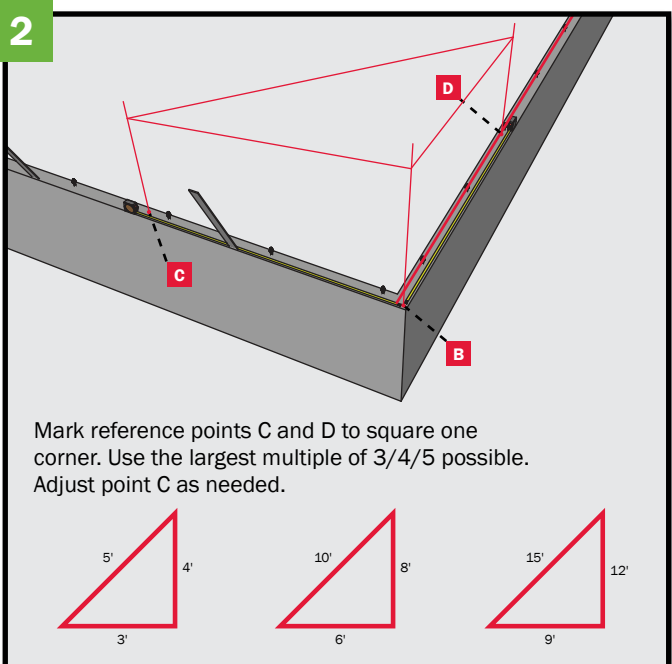
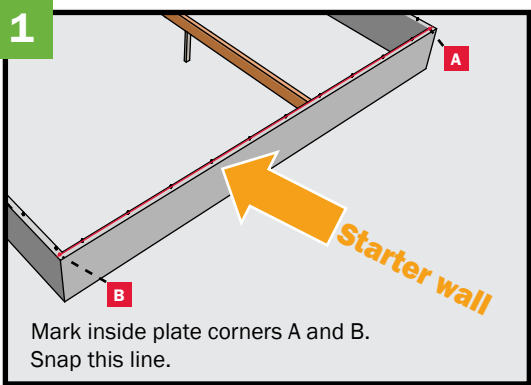
Cutting Blocking Panels



SQUARE AND SNAP LINE FOR SILL PLATE



Architect/Engineer Plan



See architect or engineer plans for dimensions and special details

1 3/4" min. from each edge

Post above

See Engineer or Architect plan for locations

E:
aware of joist
s changes

The diagram shows a cross-section of a roof assembly. A brown layer (insulation) is on top of a tan layer (sheathing). A diagonal line represents a joist. A red 'X' is drawn over the tan layer, and a red '300' is written next to it. Another red 'X' is drawn over the brown layer, and a red '300' is written next to it. A yellow circle with a black exclamation mark is next to a black box containing the text 'E: aware of joist s changes'.



See Architect/Engineer plan for spacing

Check plans

Normal spacing

NOTE:
Be aware of spacing changes

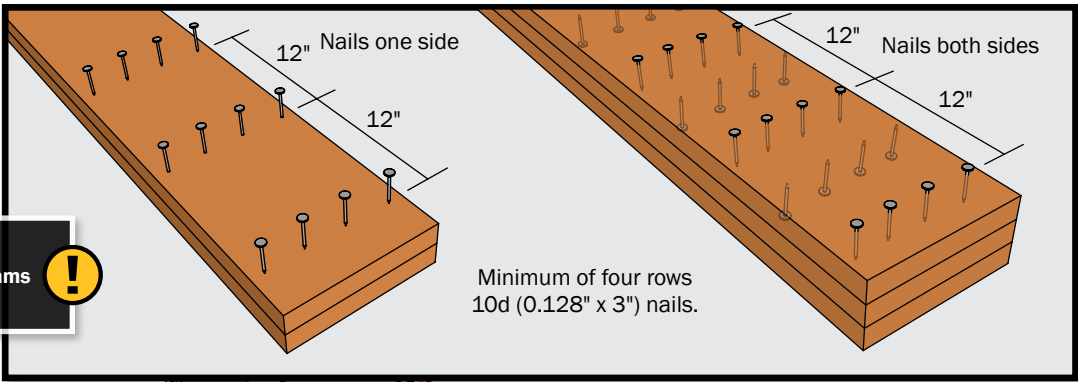


Diagram illustrating the layout of squash blocks at a strap. The diagram shows a cross-section of a wall with a strap (a horizontal member) and a vertical wall stud. A diagonal brace is shown. The label "Wall studs above" points to the vertical stud. The label "Squash blocks" points to a rectangular block placed against the wall stud. The label "Layout squash blocks at strap" points to a red line with 'X' marks indicating the layout of the squash blocks along the strap.

Move bolt. Joist may be moved instead of bolt, if approved by architect, engineer, or Weyerhaeuser rep.

Do not notch for bolt

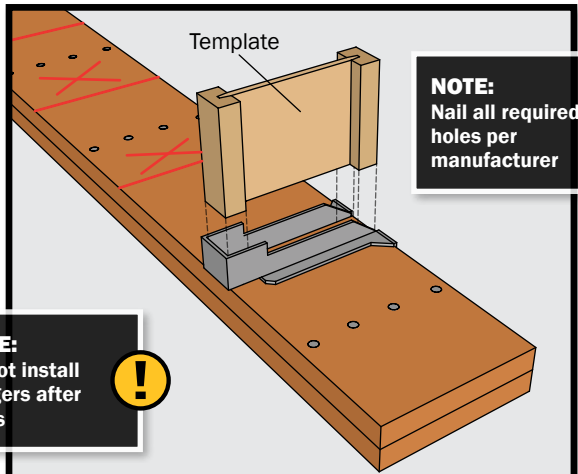
Fastening Per Engineer's Specifications (Top Loaded Beams ONLY)



NOTE:
Assemble beams
on ground

Minimum of four rows
10d (0.128" x 3") nails.

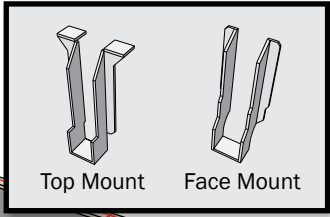
Hanger Installation



NOTE:
Nail all required
holes per
manufacturer

NOTE:
Do not install
hangers after
joists

Plan Label	Qty	Manuf.	Product	Face/Supporter Nails	Top Nails
H2	27	SST	HU2.1/9	14- 10d common	-
H3	2	SST	HU2.1/9	14- 10d common	-

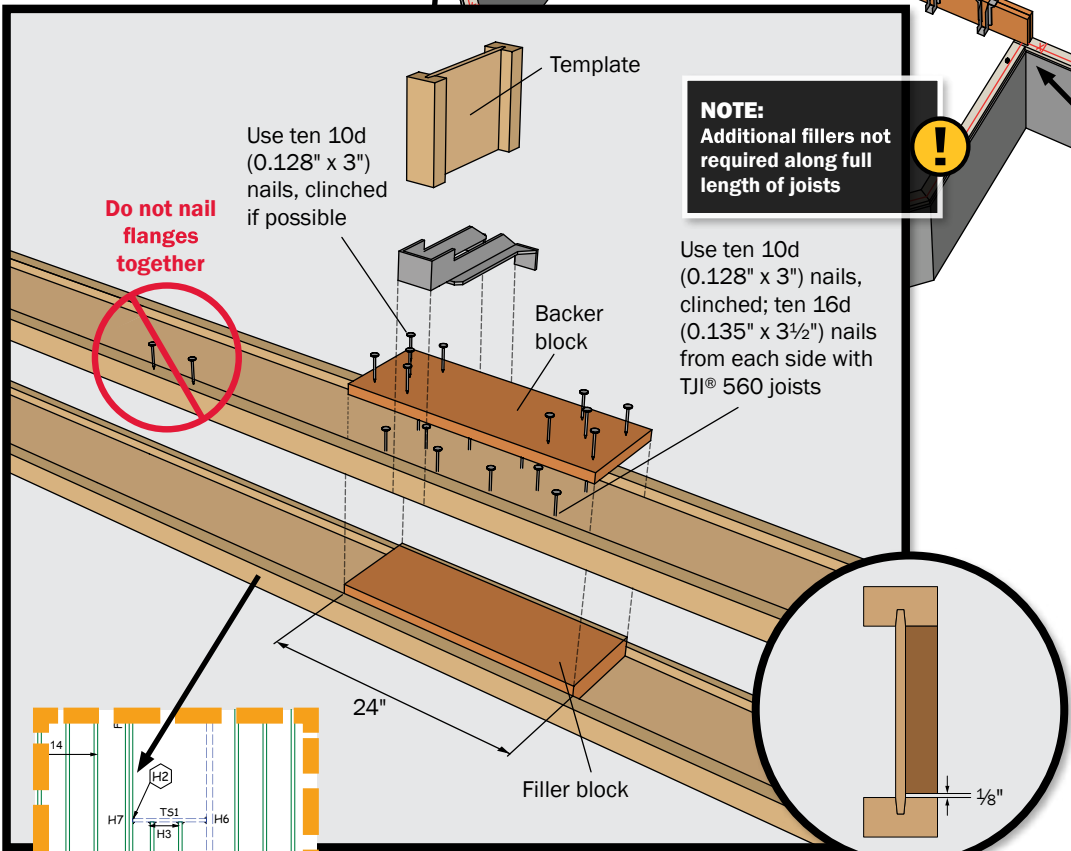


NOTE:
See Engineer's plans
or layout plans for
special fastening of
side-loaded beams!

NOTE:
Use galvanized nails to
connect products to treated
lumber sill plates. Not
required with StrandGuard®
TimberStrand® LSL sill plates.

CAUTION:
Beams are heavy. Use
appropriate equipment
when lifting/placing beams
to avoid injury.

Building Double TJI® Joist to
Support Header (Detail H2)

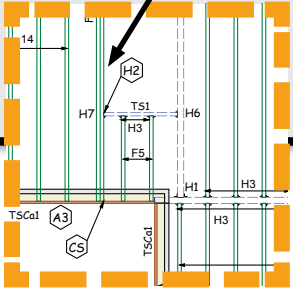
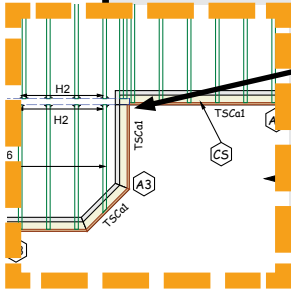


NOTE:
Additional fillers not
required along full
length of joists

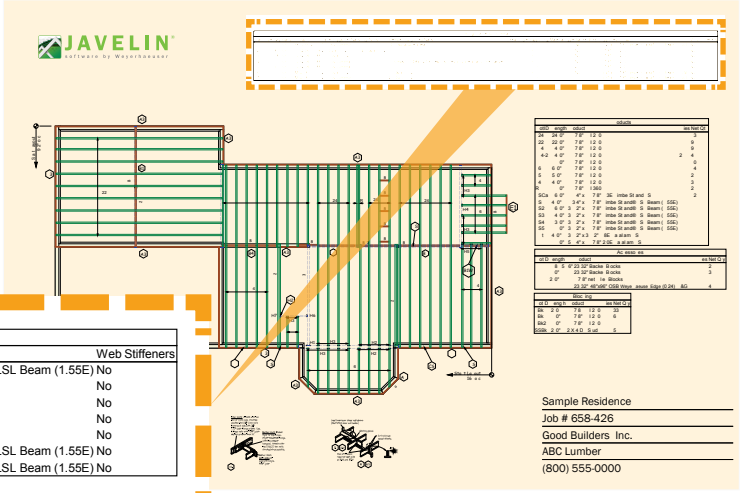
Use ten 10d
(0.128" x 3")
nails, clinched
if possible

Use ten 10d
(0.128" x 3") nails,
clinched; ten 16d
(0.135" x 3 1/2") nails
from each side with
TJI® 560 joists

Minimum
beam
bearing
length
(per plan)

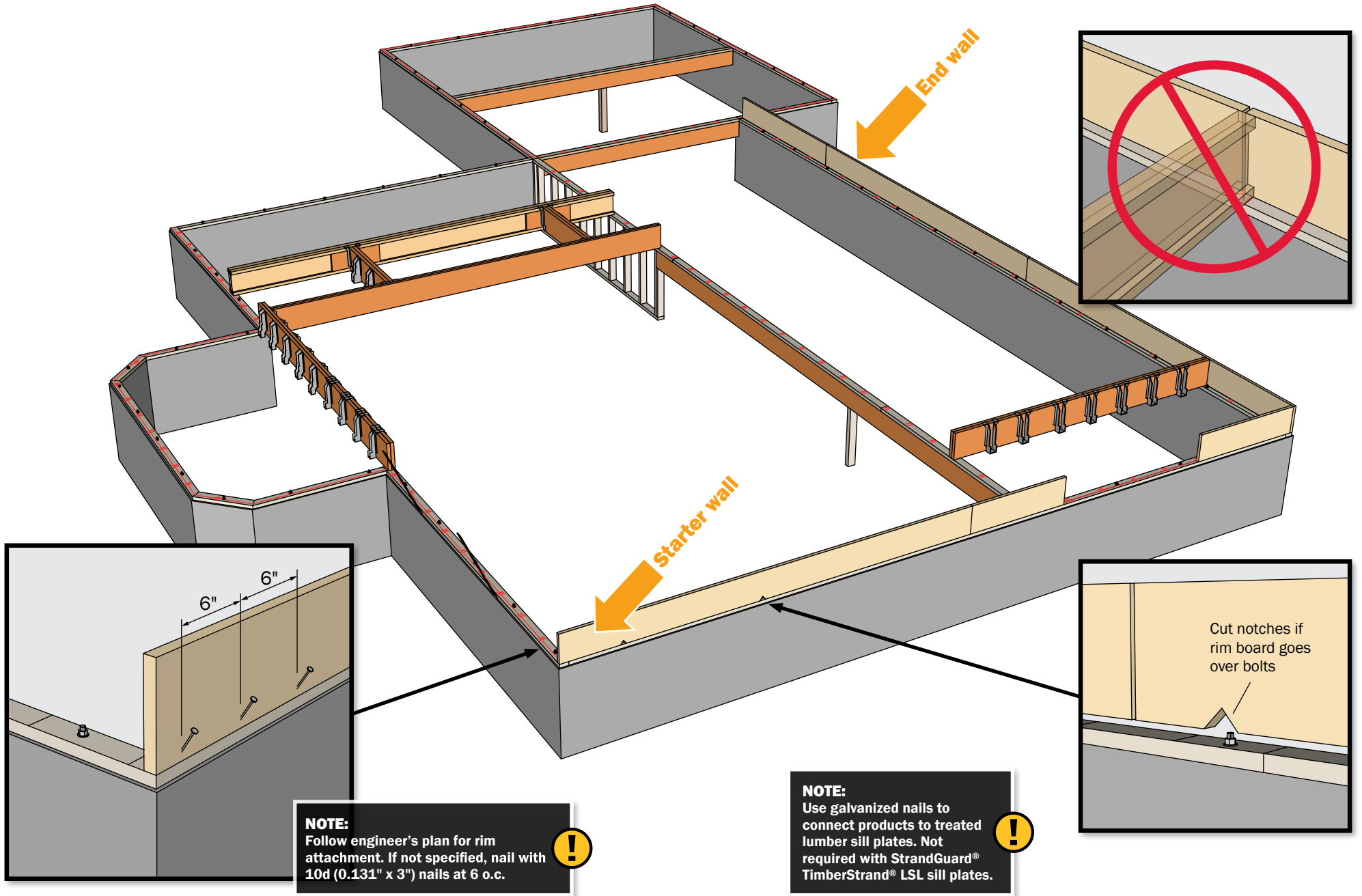


Install backer blocks tight to top
flange (tight to bottom flange
with face mount hangers) with
1/8" min. gap

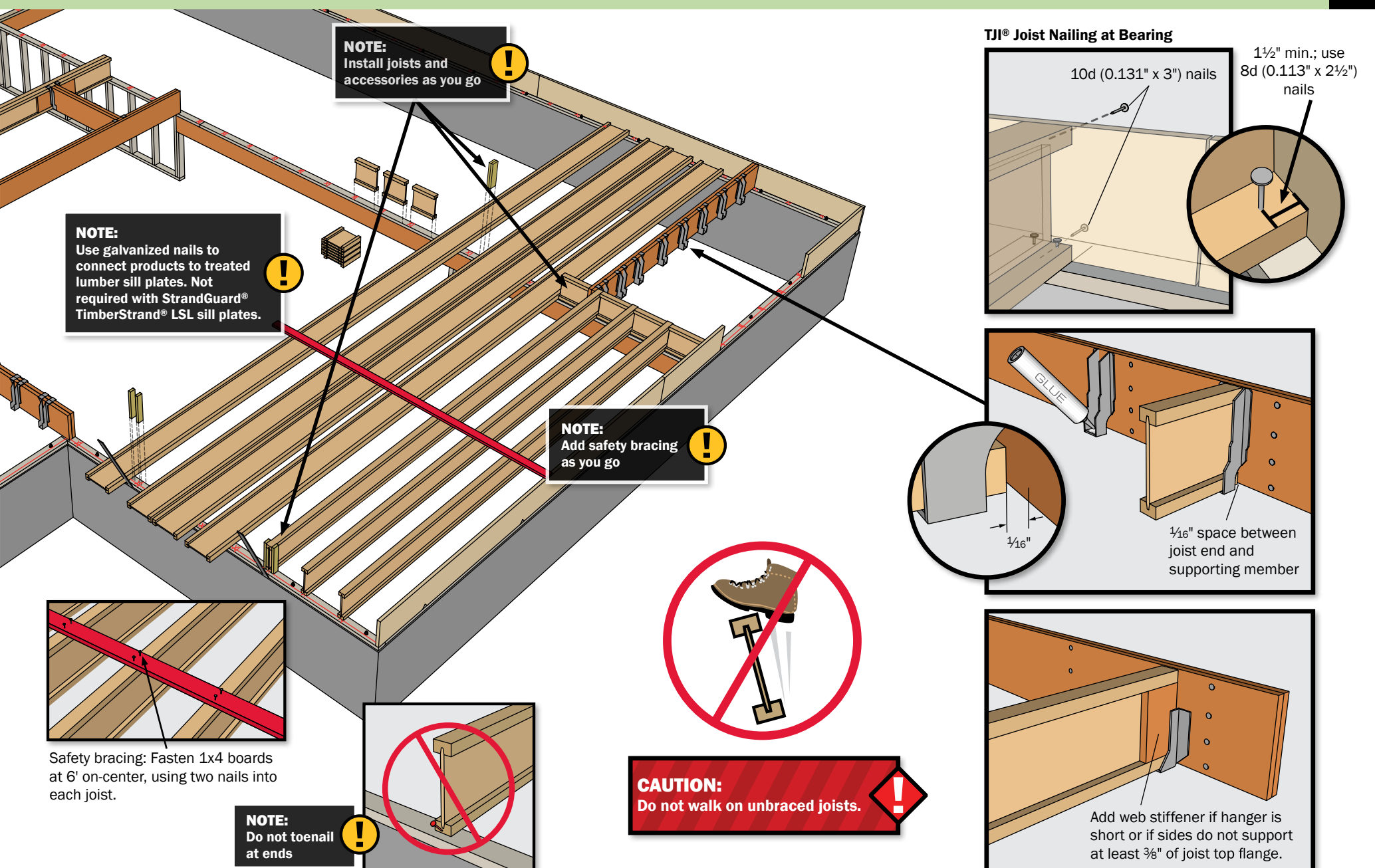


Framing Connector Summary									
Plan Label	Qty	Manuf.	Product	Face/Supporter Nails	Top Nails	Member/Supported Nails	Skew Slope	Supporting Material	Type Backer Blks. Supported Product
H1	1	SST	HGUS412	56- 16d common	-	20- 16d double shear	-	LSL	No 3 1/2" x 11 7/8" TimberStrand® LSL Beam (1.55E) No
H2	8	SST	ITS2.06/11.88	2- 10d x 1-1/2	-	-	-	LSL	No 11 7/8" TJI 210
H3	18	SST	IUS2.06/11.88	10- 10d x 1-1/2	-	-	-	LSL	No 11 7/8" TJI 210
H4	1	SST	IUS2.06/11.88	10- 10d common	-	1- Simpson SD8x1.25 screw installed thru the seat of the hanger	-	LSL	No 11 7/8" TJI 210
H5	3	SST	IUS2.06/11.88	10- 10d common	-	-	-	IJOIST	2 11 7/8" TJI 210
H6	1	SST	MIU1.81/11	20- 10d x 1-1/2	-	2- 10d x 1-1/2	-	LSL	No 1 3/4" x 11 7/8" TimberStrand® LSL Beam (1.55E) No
H7	1	SST	MIU1.81/11	20- 10d common	-	2- 10d x 1-1/2	-	IJOIST	1 1 3/4" x 11 7/8" TimberStrand® LSL Beam (1.55E) No

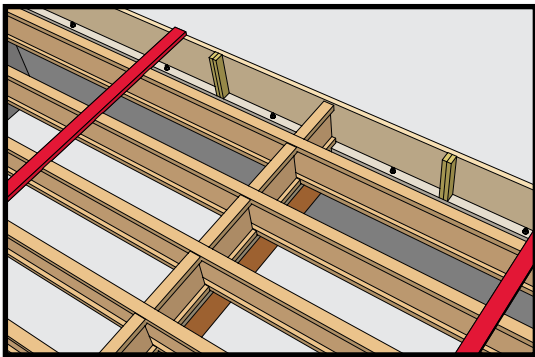
See architect or engineer plans for dimensions and special details



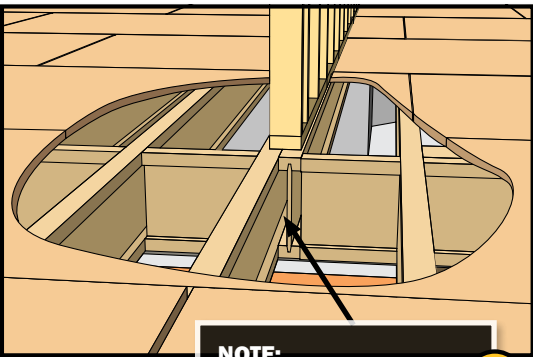
INSTALL JOISTS, ACCESSORIES, AND SAFETY BRACING



Squash Blocks at Multiple Studs from Above

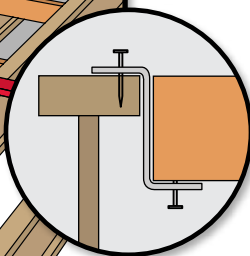
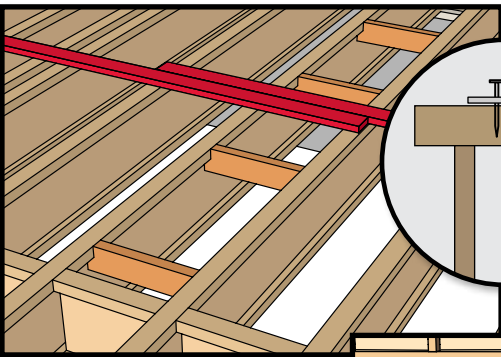


Double Joist Under Shear or Braced Wall



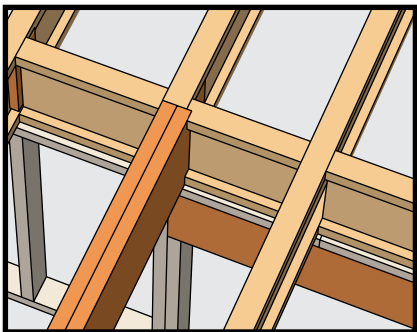
NOTE:
No filler unless specified
by engineer or architect

Joists Under Non-Bearing Wall

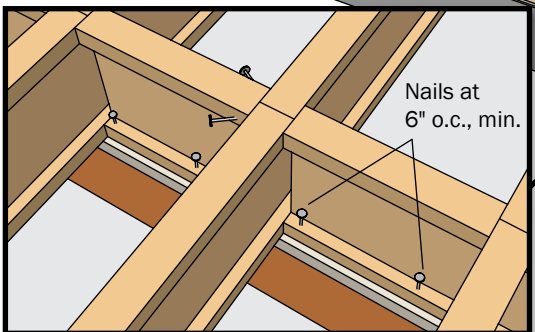


Alternative attachment
of block between joists
at non-bearing walls

Blocking at End of Beam

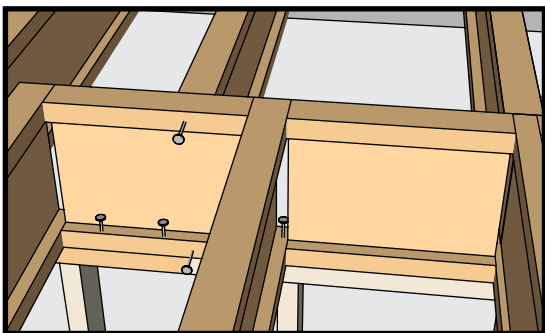


Blocking at Ends of Joists

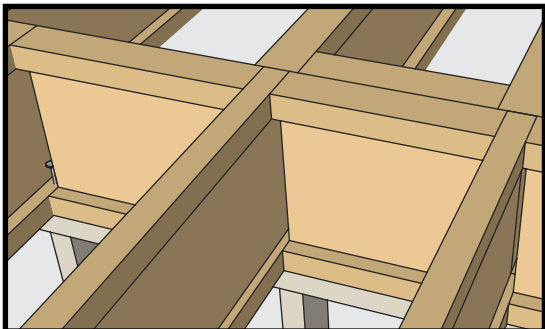


Nails at
6" o.c., min.

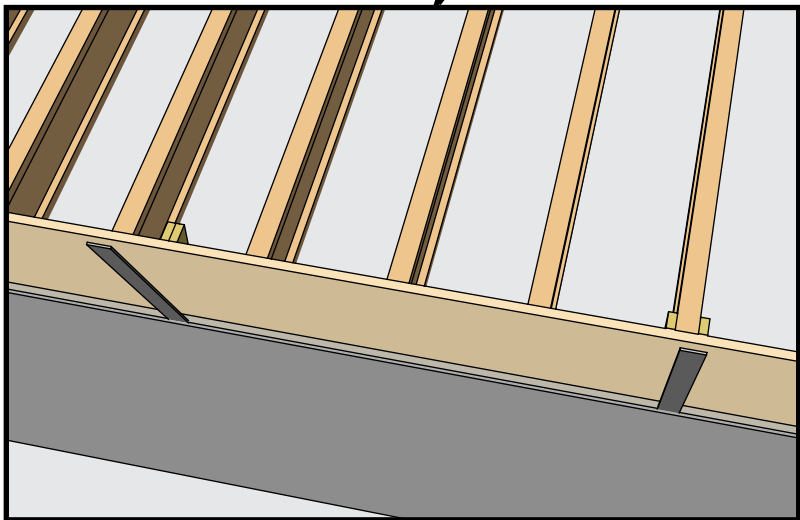
Blocking for Same Joist Series, Different Spacing



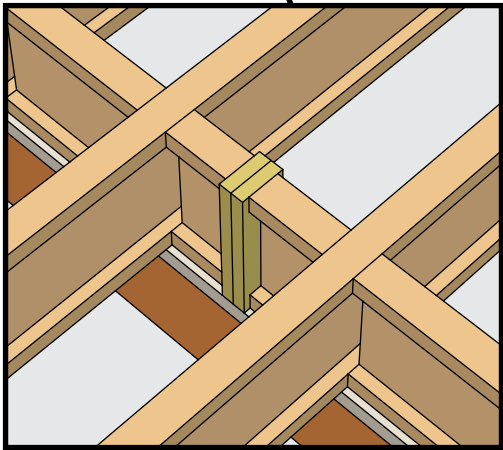
Blocking for Different Joist Series, Same Spacing



Squash Blocks at Foundation Straps

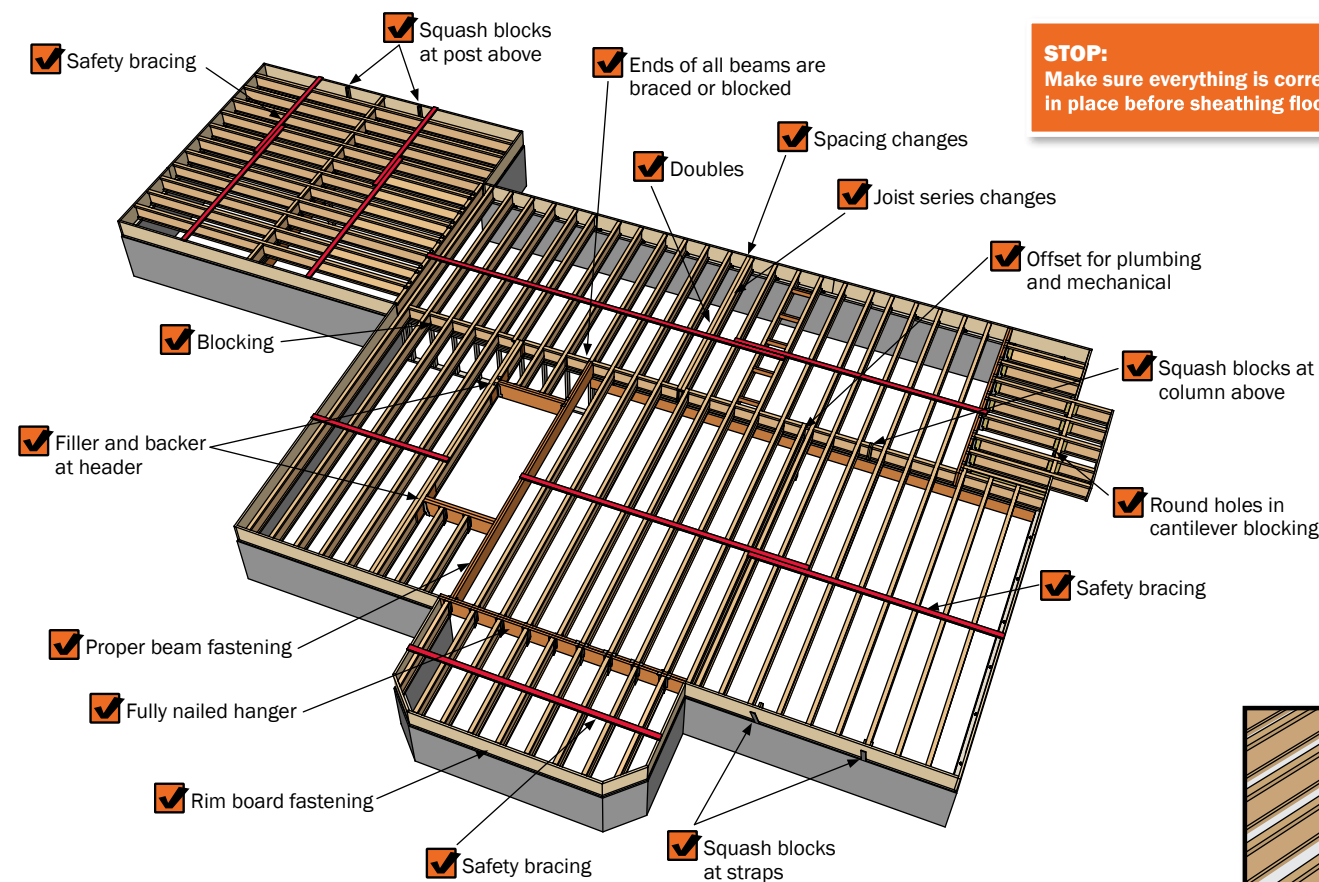


Squash Block at Column



NOTE:
Use galvanized nails to
connect products to treated
lumber sill plates. Not
required with StrandGuard®
TimberStrand® LSL sill plates.

Final Check Before Subfloor

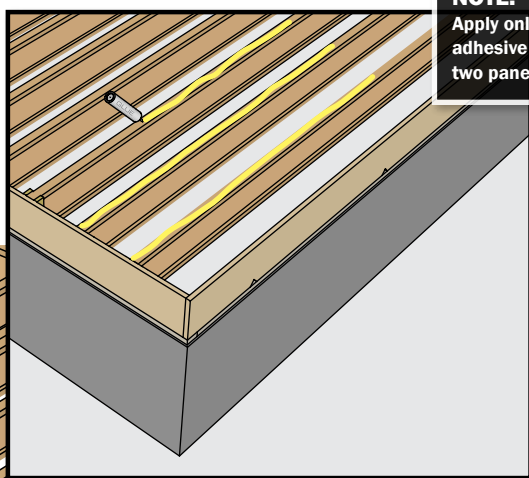


STOP:
Make sure everything is correct and in place before sheathing floor



CAUTION:
Do not walk on unbraced joists.

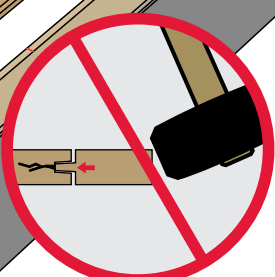
NOTE:
Apply only enough adhesive to set one or two panels at a time



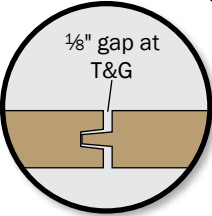
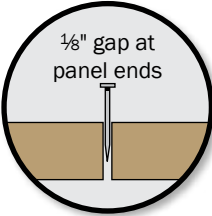
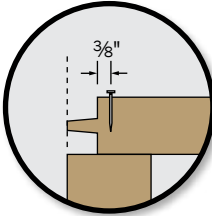
NOTE:
Stagger panels by two joists, minimum

NOTE:
Fasten per engineer's specifications. Minimum nailing is 6" o.c. at edge and 12" o.c. in field. Fully nail each panel as it's laid.

Drop panel into place. Avoid shifting.

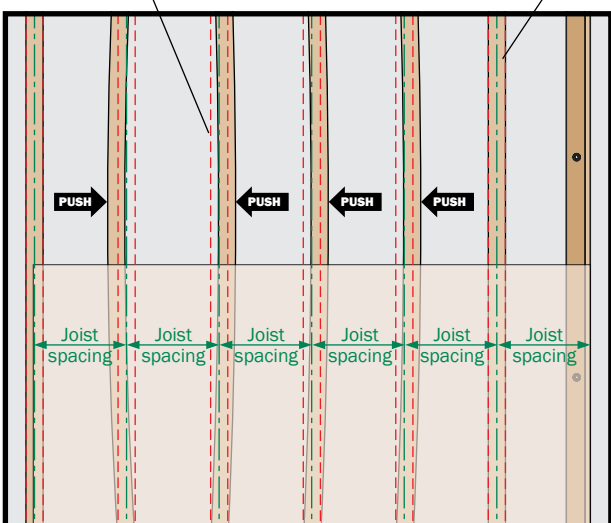


Do not force together



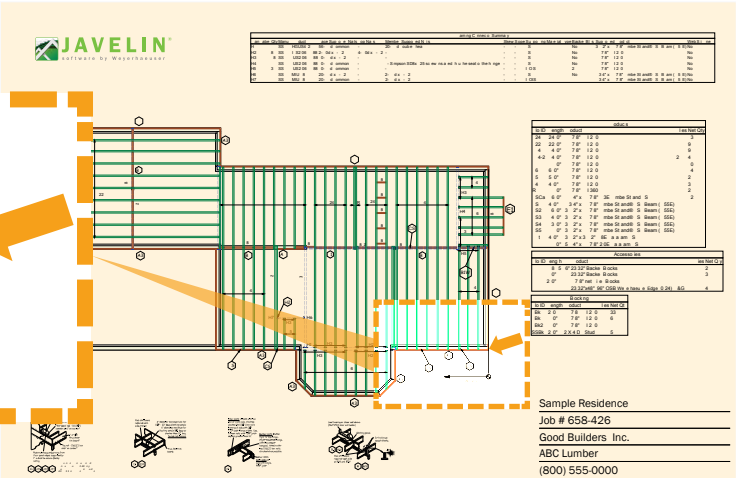
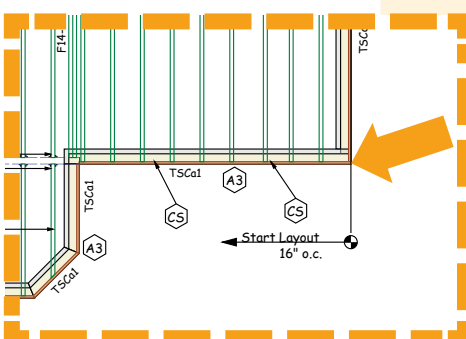
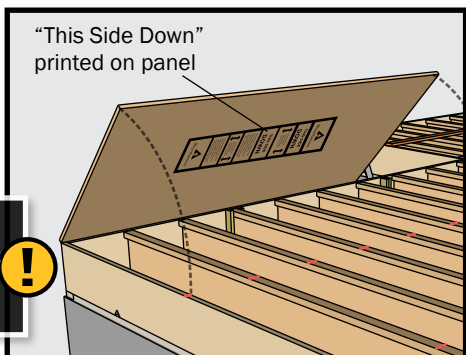
Push or pull joists into line before nailing off

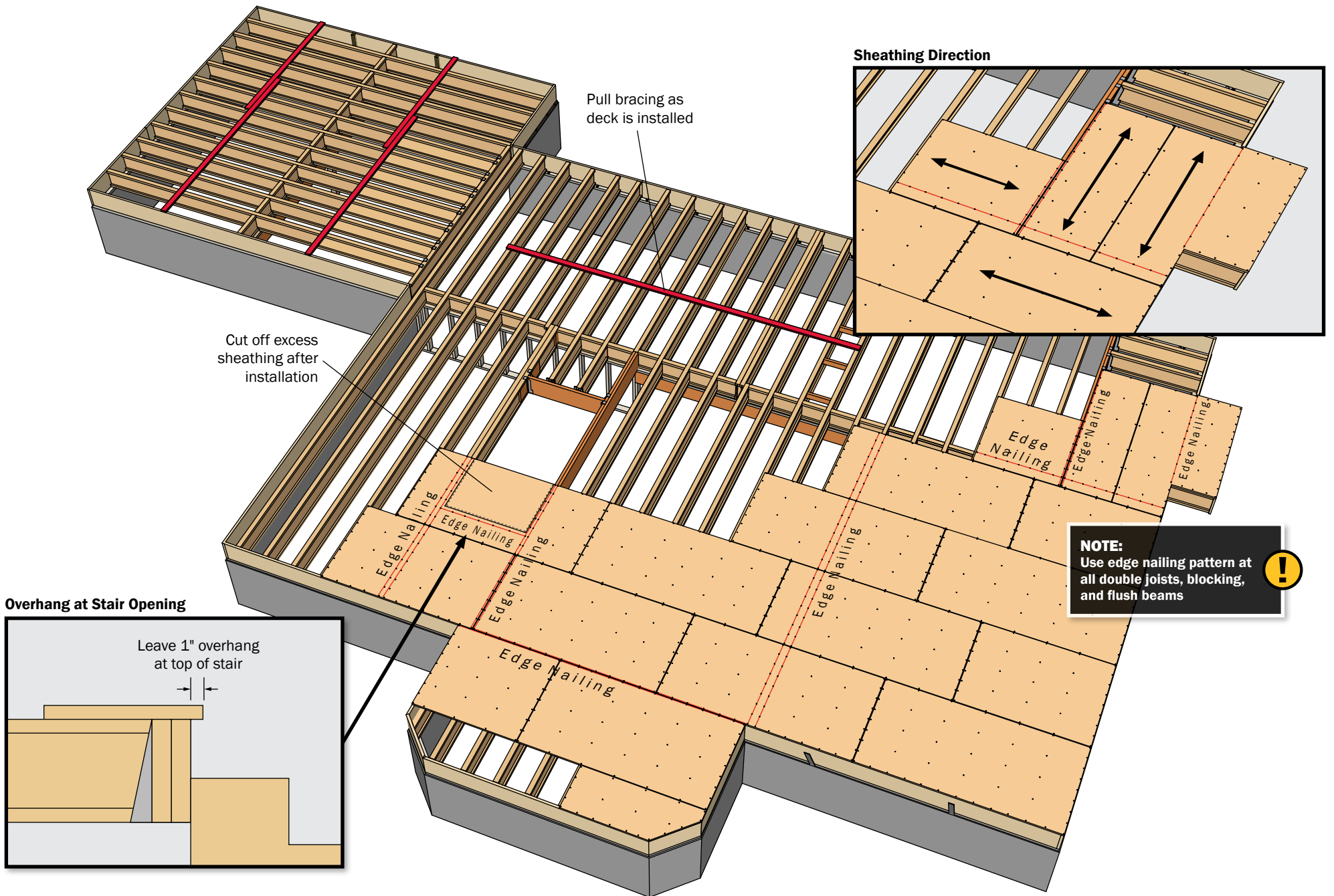
Good alignment



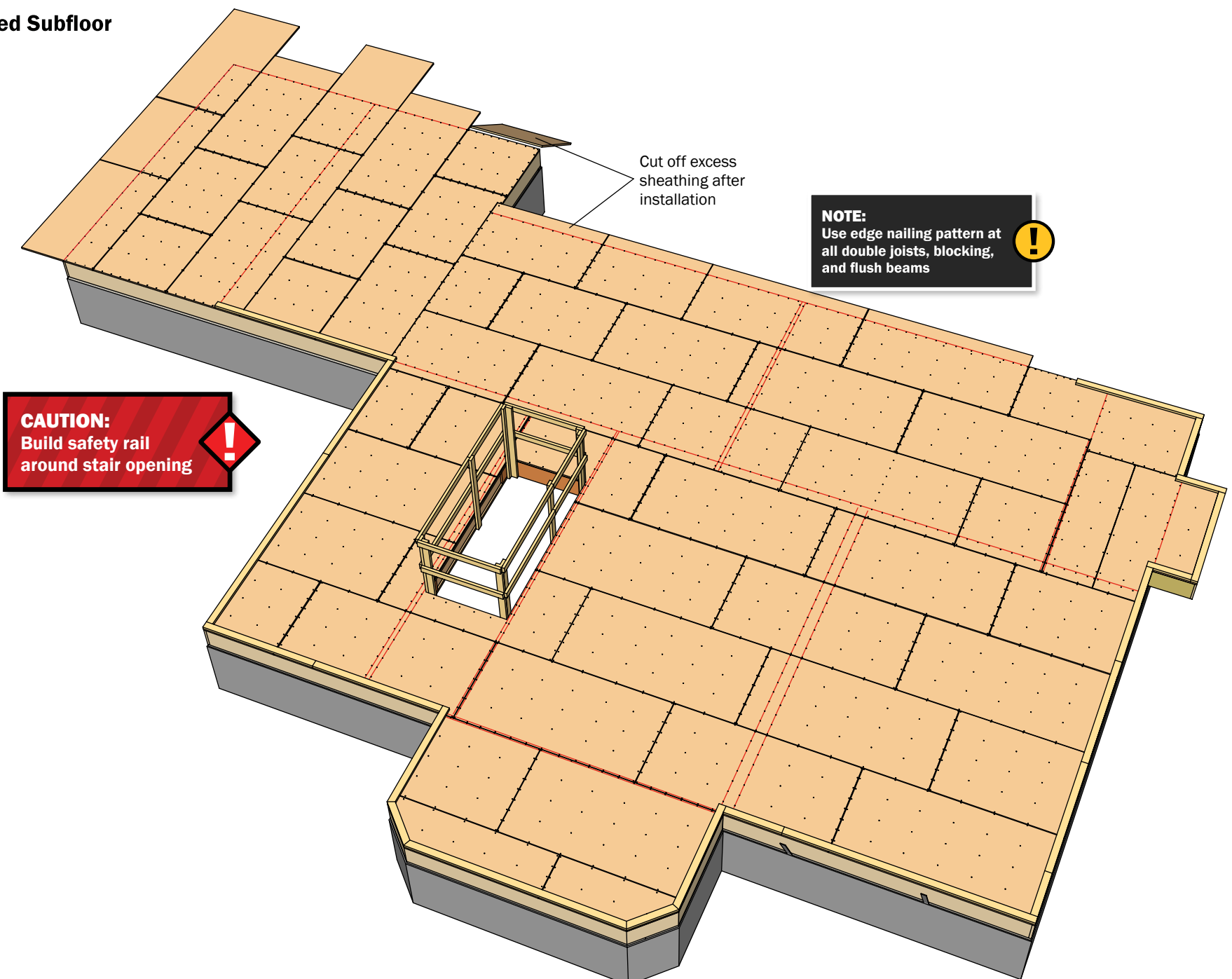
NOTE:
Check nailing criteria (see Appendix)

NOTE:
Make sure the first sheet is perfectly square at edges

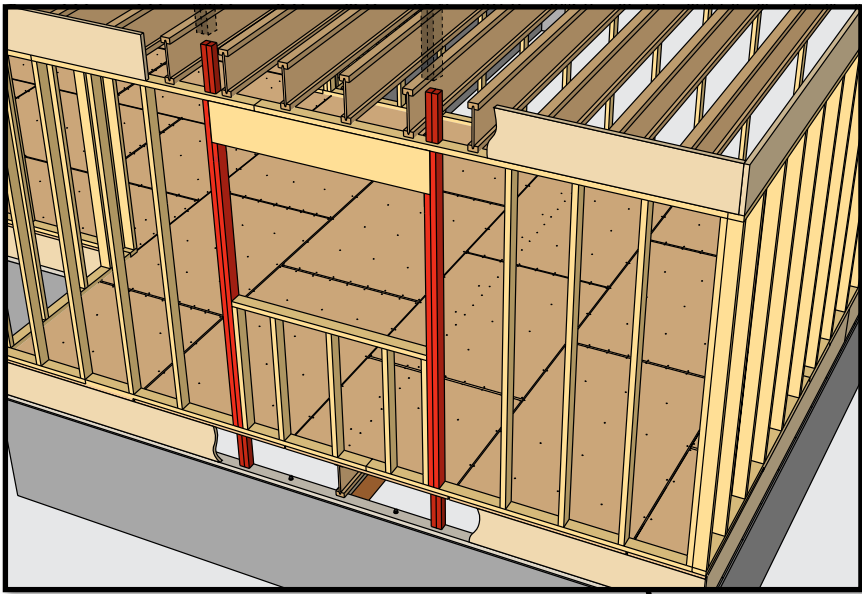




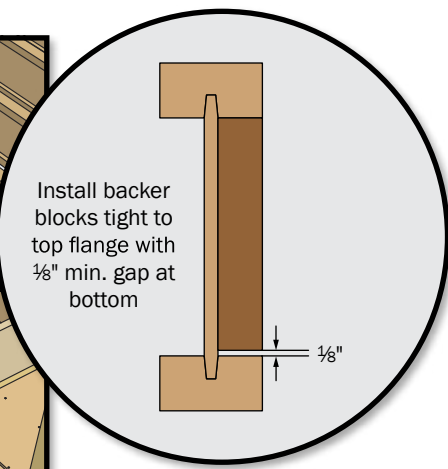
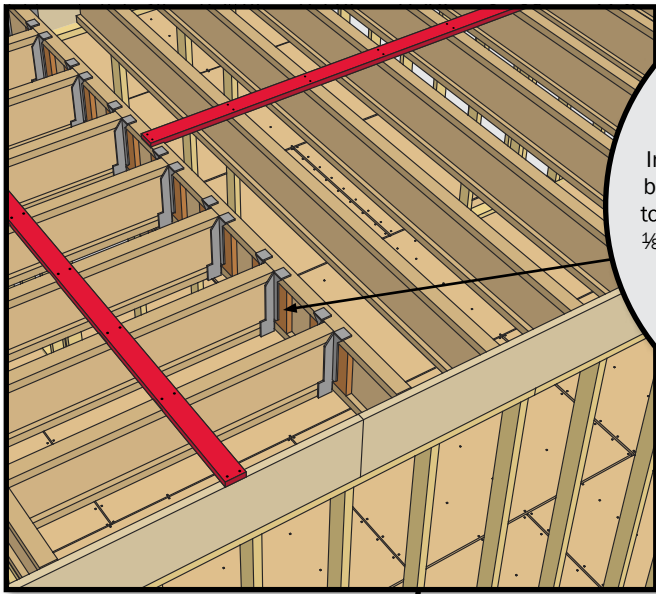
Finished Subfloor



Transfer Continuous Loads to Foundation



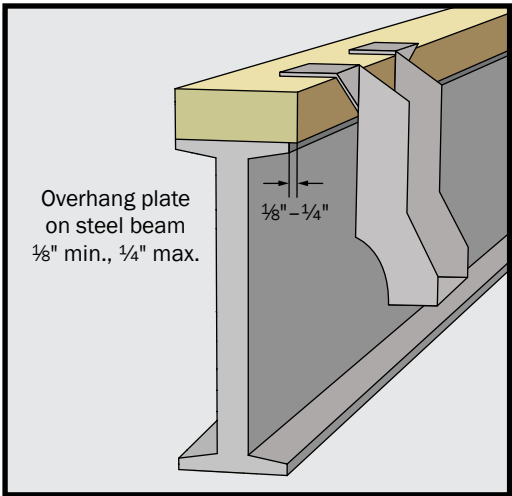
Top Flange Hangers



CAUTION:
Stack sheathing
over wall directly
supported by
foundation



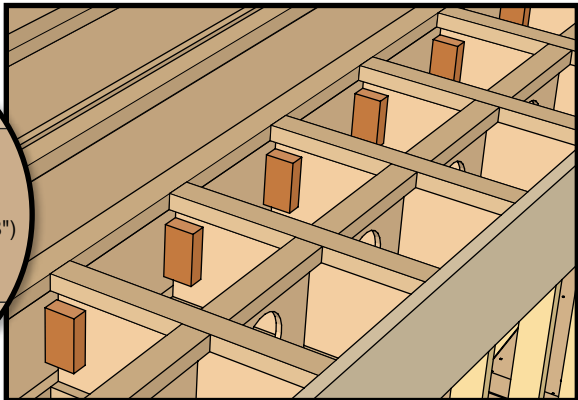
Draft-stop blocking
between garage wall
and living space



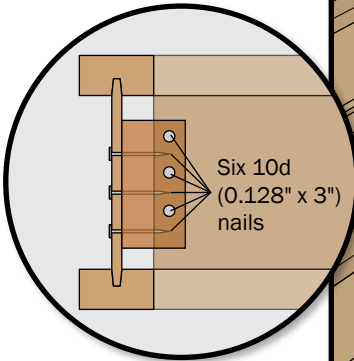
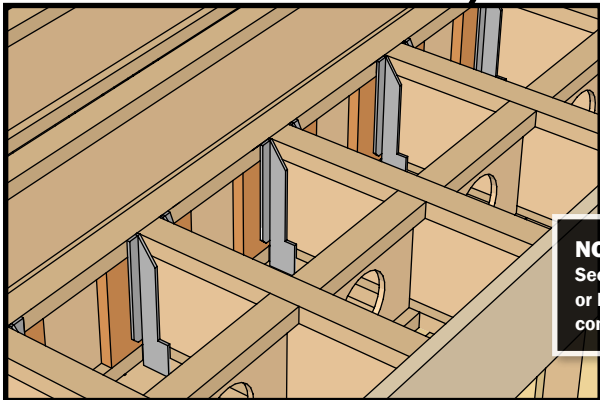
Tall walls not
shown
(for clarity)

Tall walls not
shown
(for clarity)

Brick Ledge Cantilever with Blocks
(when specified on plans)



Brick Ledge Cantilever
with Face Mount Hangers



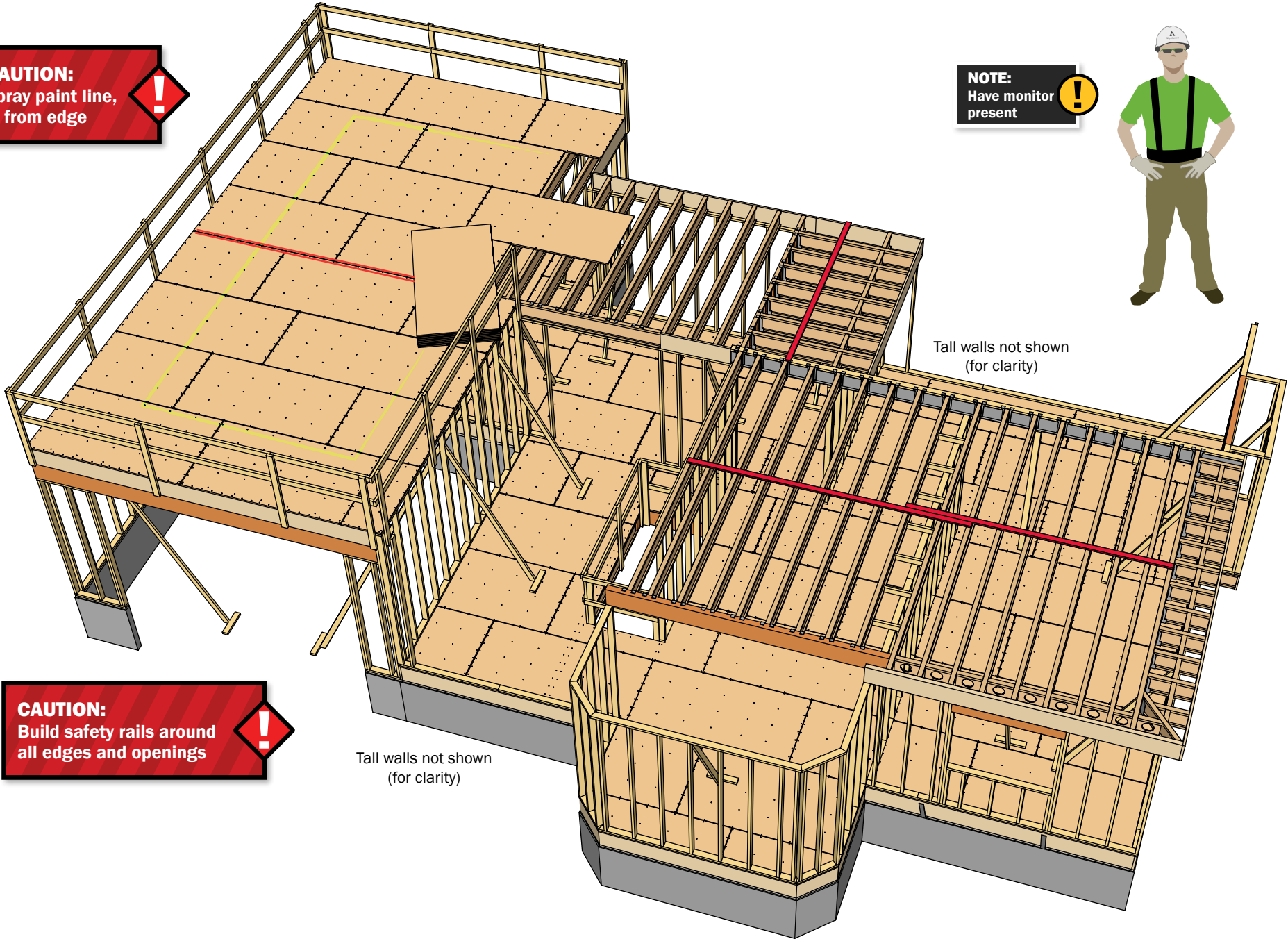
NOTE:
See engineer's plans
or layout plans for
connection type



See architect or engineer plans for dimensions and special details

CAUTION:
Spray paint line,
6' from edge

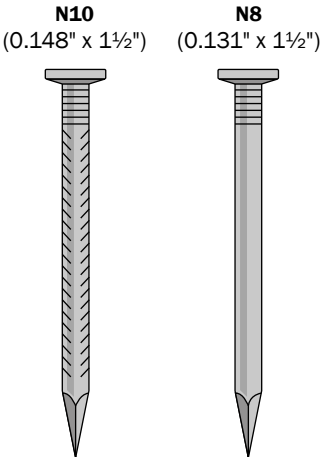
NOTE:
Have monitor
present



APPENDIX: NAIL CHART

Please refer to the following chart for all nail sizes and applications in this guide

Application	Nail Direction	Nail Quantity and Specifications
Joist to plate	Face nail	(1) 8d (0.113" x 2½") each side
Rim to TJI® 110 joist	Face/end nail	(1) 10d (0.131" x 3") per flange
Rim to TJI® 210–560 joists	Face/end nail	(1) 16d (0.135" x 3½") per flange
TJI® 560 rim to TJI® 560 joist	Toe nail	(2) 10d (0.128" x 3") per flange
Backer blocks	Face nail	(10) 10d (0.128" x 3")
Filler blocks for TJI® 110–360 joists	Face nail	(10) 10d (0.128" x 3")
Filler blocks for TJI® 560 joist	Face nail	(10) 16d (0.135" x 3½") each side
Rim to plate (minimum)	Toe nail	(1) 10d (0.131" x 3") at 6" o.c.
Weyerhaeuser Edge Gold™ panels 23/32"	Face nail	6d (0.120" x 2") deformed nail
Weyerhaeuser Edge Gold™ panels 7/8"	Face nail	8d (0.131" x 2½") nail or 8d (0.120" x 2½") deformed nail



Common Hanger Nail Sizes

See architect or engineer plans for dimensions and special details



Have a damaged joist or beam?

File a damage report online for prompt service from your regional technical office. Scan the QR code with your smartphone or go to **woodbywy.com/support**.

